

<u>DIVISION OF MINES GUIDELINES FOR APPLICATION OF REGULATORY STANDARDS MANUAL</u>	
COAL MINE SAFETY ACT	CHAPTER 14.3
ARTICLE 12	FIRST AID EQUIPMENT; MEDICAL CARE; EMERGENCY MEDICAL SERVICES PERSONNEL
Issue Date: 4/10/00 Revised Date:	Page 1 of 5

Section 45.1-161.199.

Certified Emergency Medical Services Personnel

Mandated Emergency Medical Services Personnel at Underground Mines and Additional Equipment Required for Advanced First Aid, EMT, and First Responder Underground

This section of the MSA mandates that emergency medical services personnel be available at all underground coal mines in sufficient numbers to assure response to an injured miner within a reasonable time when miners are working at that mine. The operator may elect to utilize emergency medical technicians (EMT), EMT first responders or advanced first-aid trainees. EMT and EMT first responders are certified by Virginia EMS and when employed by the operator must fully meet EMS certification standards. Advanced first aid trainees are certified by the Board of Coal Mining Examiners and must meet Board certification standards including annual retraining and current CPR certification.

Sufficient numbers of emergency medical services personnel must be available at all underground coal mines to enable response time to any emergency at the mine not to exceed fifteen minutes from time of notification. It is important that the mine inspector evaluate the availability of the number and location of emergency medical services personnel during inspection activities. Careful consideration should be given to those operations where only one EMT or responder is available on a shift. Contingencies for when that certified person is absent from the mine should be reviewed. Mine records should be reviewed in determining when and how contingencies were implemented.

Those underground mine operators electing to utilize advanced first aid trainees must have at least one trainee available if less than five miners are employed. Two or more trainees must be available on each shift when more than five miners are employed. Alternative approaches to the use of advanced first aid trainees may be submitted by the operator to the Chief for approval. The mine inspector should evaluate at multiple sections and multiple shift mines the need for more than two advanced first aid trainees to respond to emergencies. In all situations where mine operators elect to use advanced first aid trainees additional personnel above the minimum should be encouraged.

Failure to have the required certified emergency medical services personnel available at an underground mine where miners are working is a violation of the MSA. Inspectors should issue a notice of violation with an abatement date of two working days. Where availability and employment of certified emergency medical services personnel at a mine under notice of violation is not achieved within two working days, an extension of an additional three working days may be granted by the inspector if justified by the operator.

Emergency medical services personnel are not required at licensed underground coal mines when the operation is in non-production status and only mine examinations are being performed, when reclamation work is being done at the mine, and when the mine is performing initial face-up work from the surface.

“*Necessary equipment*” required for an EMT is as follows or as otherwise approved by the Chief:

- I. Equipment to be located on the working section or area of work activities:
 1. Portable suction apparatus with wide-bore tubing and rigid pharyngeal suction tip
 2. Hand-operated bag mask ventilation unit with adult size mask. Clear mask is preferable. Valves must operate in cold weather, and unit must be capable of use with oxygen supply.
 3. Mouth gag or bite stick made of wood or plastic (2)
2. Dressings:
 - (a) Trauma dressing, approximately 8” x 10” – 6/8 ply when folded, sterile and individually wrapped (4)
 - (b) Gauze pads, 4” x 4” sterile and individually wrapped (24)
 - (c) Occlusive dressing – petroleum gauze (6) or aluminum foil 18” x 25’ (1 roll or plastic wrap 18” x 25’, one roll) shall be acceptable
3. Bandages:
 - (a) Roller or conforming gauge type in 2”, 3”, or 4” widths (12 total)
 - (b) Triangular or cravat type, 36” x 26” x 51”, triangle unfolded (10)
4. Plain adhesive tape (4 rolls)
5. Large safety pins
6. Shears for bandages
7. Blood pressure manometer, cuff and stethoscope
8. Uncomplicated inflatable splints
9. Oropharyngeal airways in adult size (3)
10. Mouth-to-mouth artificial ventilation airways for adults (3)
11. Latex examination gloves (1 dozen)
12. Resuscitation mask with one-way valve (2)
- II. Equipment to be centrally located at the mine site:
 1. Portable oxygen equipment with adequate tubing and semi-open valveless, transparent mask in adult size
 2. Two-sterile burn sheets

3. Padded board splints for splinting fractures of the lower extremities (2 or more each)
 4. Short and long spine boards with accessories or two (2) split metal stretchers with accessories.
- III. Equipment recommended to be located at the mine site*:
1. Padded board splints for splinting fractures of the upper extremities (2 or more each)
 2. Cervical collars (1 medium size and 1 large size)

**Recommendation only – not a requirement*

This listing reflects the equipment necessary to provide care to critically ill or injured personnel based on training and certification requirements of the EMT.

“Necessary equipment” required for a first responder is as follows or as otherwise approved by the Chief:

- I. Equipment to be located on the working section or area of work activities.
 1. Dressings:
 - (a) Trauma dressing, approximately 8” x 10” – 6/8 ply when folded, sterile and individually wrapped (4)
 - (b) Gauze pads, 4” x 4” sterile and individually (24)
 - (c) Occlusive dressing – petroleum gauze (6) or aluminum foil 18” x 25’ (1 roll) or plastic wrap 18” x 25” (1 roll) shall be acceptable
 2. Bandages
 - (a) roller or conforming gauze type in 2”, 3”, or 4” widths (12 total)
 - (b) Triangular or cravat type, 36” x 36” x 51” triangle unfolded (10)
 3. Plain adhesive tape (4 rolls)
 4. Large safety pins
 5. Shears for bandages
 6. Uncomplicated inflatable splints
 1. Mouth-to-mouth artificial ventilation airways for adults (3)
 2. Latex examination gloves (1 dozen)
 3. Resuscitation mask equipped with one-way valve (2)
- II. Equipment to be centrally located at the mine site:
 1. Two sterile burn sheets
 2. Padded board splints for splinting fractures of the lower extremities (2 each)
 3. Short and long spine boards with accessories or two (2) split metal stretchers with accessories

- III. Additional equipment recommended to be located at the mine site*.
1. Padded board splints for splinting fractures of the upper extremities (2 or more each)
 2. Cervical collars (1 medium size and 1 large size)

**Recommendation only – not a requirement*

This listing reflects the equipment necessary to provide care to critically ill or injured personnel based on training and certification requirements of the first responder.

“Necessary Equipment” Required for Advanced First Aid Trainees is as follows or as otherwise approved by the Chief:

1. One stretcher
2. One broken backboard (if a splint-stretcher combination is used, it will satisfy the requirements of both A and B)
3. 36 Triangular bandages
4. 8 four inch bandage compresses
5. 24- 4”x 4” gauze pads
6. 8 two inch bandage compresses
7. 12 one inch adhesive compresses (band-aids)
8. One foille
9. Two full size wool blankets (at least 6’ x 6’)
10. One rubber blanket or equivalent substitute (DM would accept another wool blanket as described in 9)
11. Two tourniquets
12. One one-ounce bottle of spirits of ammonia or one dozen ammonia ampules
13. Two inflatable plastic arm splints – two inflatable plastic leg splints
Two rigid wood splints 24” x 3.5” x 1/8” or wire ladder splints
Two rigid wood splints 32” x 4” x 1/8”
Two rigid wood splints 40” x 4” x 1/8”
14. Two rigid cervical collars (one medium, one large) (Stiffneck, Philadelphia or Vertebrace type)
15. One dozen pair latex examination gloves
16. 2 resuscitation masks equipped with one-way valve
17. 3 adult oropharyngeal airways (different sizes)
18. 4 rolls adhesive tape (at least one inch wide)
19. One pair medical-type scissors or medical-type shears
20. 2 Sterile burn sheets
21. One dozen paper or styrofoam cups (non-folding type)
22. Dressings
 - (a) Four trauma dressings, at least 8” x 10” sterile and individually wrapped
 - (b) Occlusive dressings – 6 petroleum gauze or one roll aluminum foil (18” x 25’) or one roll plastic wrap (18” x 25’)

- (c) Three rolls kling gauze (2", 3", or 4" wide)
- 23. Eye wash-irrigating solution (2 four ounce bottles or equivalent)
- 24. 4 cold packs

This listing reflects the equipment necessary to provide care to critically ill or injured personnel based on training and certification requirements of the advanced first aid trainee.